

## PATENT CLAIMS

1. A brush block (6) for transmitting currents to a slip ring (7) by means of at least one said multiwire sliding element (MWSE) (3), characterized in that a plurality of said MWSE (3) connected electrically in parallel are arranged at said brush block one after another and distributed in an arc in said direction of sliding (9).
2. Brush block in accordance with claim 1, characterized in that said brush block has a MWSE carrier (4) with a bent inner wall (12), at which a plurality of said MWSE (3) are arranged.
3. Brush block in accordance with claim 1 or 2, characterized in that said MWSE (3) form said layers (A, B), which are arranged in an overlapping, scale-like structure, and describe an enveloping curve (10) that is concentric with said axis (13) of the slip ring with the ends of said MWSE (3).
4. Brush block in accordance with claim 1, 2 or 3, characterized in that said MWSE layers (A, B) have different numbers of said MWSE (3).
5. Brush block in accordance with one of the above claims, characterized in that said MWSE (3) of said adjacent layers (A, B) have a lateral offset and are arranged staggered.
6. Brush block in accordance with one of the above claims, characterized in that said MWSE

carrier (4) has at said inner wall (12) a plurality of said stepped incisions (5), which are arranged in an arc on the circumferential side and at which said MWSE (3) are arranged.

7. Brush block in accordance with one of the above claims, characterized in that said stepped incisions (5) have a step side (5') that is essentially tangential to said slip ring (7) and a step side (5'') that is arranged at right angles thereto.

8. Brush block in accordance with one of the above claims, characterized in that said MWSE (3) comprise a conductive carrier leaf (1) with said multiwire slip rings (2) arranged thereon.

9. Brush block in accordance with one of the above claims, characterized in that said wires of said multiwire slip ring (2) are bent at the free end.

10. Brush block in accordance with one of the above claims, characterized in that said wires of said multiwire slip ring (2) are integrated in a one-layer or multilayer paintbrush structure.

11. Brush block in accordance with one of the above claims, characterized in that a plurality of said brush blocks (6) can be arranged next to one another and distributed over the circumference of a slip ring (7).

12. Rotating current transmission unit with one or more said slip rings (7) and one or more said brush blocks (6), which are mounted rotatably in relation to one another, characterized in that said brush blocks (6) are designed in accordance with one of the claims 1 through 11.

13. Rotating current transmission unit in accordance with claim 12, characterized in that said current transmission unit (14) has said terminals (15) for power current.